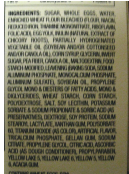




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# Grocery Guardian

## Bringing safer shopping to people with food allergies



1. Do you know what's in your groceries?

### Problem

For those with food allergies or dietary restrictions, grocery shopping can be tough. Ingredient lists are long and scrutinizing them to find one or two offending ingredients is time consuming and often results in error. We set out to make this task safer and more efficient for people with allergies or people shopping for others with allergies.

### Target User Group

This application specifically targets grocery shoppers with food allergies, intolerances, or any other form of dietary restriction. Since it is designed to be used when shopping for multiple people, it is also perfect for shoppers buying food for others with dietary restrictions.



2.

### Solution

Our solution is a simple and friendly iPhone application that allows a shopper to create a profile for each person with food allergies being shopped for. Once at least one profile is set up, the shopper can use the iPhone's camera to quickly scan the barcode of a food product or search for it in a built-in database of over 60,000 products. Once a product has been found, Grocery Guardian will tell the shopper who in the profile list can or cannot eat the product, and why! The user can tap on a name to see more details about the safety of a certain product, which includes a full ingredient list with the problem ingredients highlighted.

### Final Prototype

Our final prototype is a tab-based application with 4 tabs: Product, Analyze, Profiles, and Help. It includes an integrated barcode scanner, powered by RedLaser, that utilizes the iPhone's camera to accurately capture and process barcodes. It also sports an integrated database of over 60,000 products and a remarkably simple, yet effective, profile management system, which gives users the ability to add and delete profiles, allergens, and even define custom allergens.



3. Moving counter-clockwise: You can create a profile, search for a product, or scan its barcode, and find out if that product is safe to eat for each profile.



Before and after: original mock-ups (left) and their final prototype counterparts (right).

### Design Evolution

Our design has evolved steadily from a rough set of mockups, to a thoroughly-planned, tested, and polished interface. Over the course of its evolution, we have made numerous layout changes, moved buttons, removed elements, changed the names of tabs, and added new features, such as the help tab, to help make the application easy to understand. All of our decisions have been focused on eliminating confusion in order to make using the application fast and to help users make safe choices while shopping.

#### Image sources:

1. Grocery Bag: <http://daddybrain.files.wordpress.com/2009/06/grocery20bag-2.jpg>
2. Shopper: <http://www.fooducate.com/blog/wp-content/media/Woman-Reading-Nutrition-Label.jpg>
3. RedLaser overlay: [http://if.omniais.ch/blog/wp-content/uploads/2009/10/IMG\\_0004.PNG](http://if.omniais.ch/blog/wp-content/uploads/2009/10/IMG_0004.PNG)
4. 100 Grand Chocolate Bar: <http://www.coloradoclubs.org/examples/candy/100-grand.jpg>
5. Ingredient list: [http://assets.sbnation.com/assets/34555/IMG\\_3077.JPG](http://assets.sbnation.com/assets/34555/IMG_3077.JPG)